

SAFETY MEETING TOPIC OUTLINE

Welding

- Welding, cutting, and brazing are hazardous activities that pose a unique combination of both safety and health risks to more than 500,000 workers in a wide variety of industries. The risk from fatal injuries alone is more than four deaths per thousand workers over a working lifetime.
- The hazards include both chemical and physical exposures that can lead to explosions, electrocutions, asphyxiation, falls and crushing injuries.

Fumes

- One of the biggest areas of concern is the effect fumes produced during the welding process can have on workers. Fumes generated can have debilitating health effects. Depending on the type of metal being welded, the different types of gases produced can pose various risks.
- The simplest and best way to deal with the problem of gas production is to always locate the welder in a well-ventilated area. When the welding process produces gases, it's not just the welder who's at risk. Anyone in the vicinity has the potential for breathing the dangerous fumes. An exhaust system installed as close as possible to the working area can eliminate much of the risk.

Temperature(s)

- Welding necessarily produces extreme temperatures. With high temperatures and sparks comes the risk of fire. Fire prevention should be a key component to any welding safety plan.

Fire Prevention

- This involves more than just having a fire extinguisher nearby. To prevent a fire, it's important to evaluate the working area. Welding should always be done on a concrete floor whenever possible. The risk for a fire during welding is so great that it's possible for errant sparks to enter into cracks in the concrete and start a fire in the surface below.
- Another basic pre-welding safety technique is to remove any combustible materials from the area. If this is not possible, consider using fire-resistant curtains. Also be sure to use curtain dividers for employees who are not welding.

Clothing/Personal Protective Equipment

- The same concern of sparks getting into places they shouldn't come into play when choosing personal protective equipment for the welder. In addition to choosing fire-resistant clothing, be sure to pay attention to details. Shirts with pockets and pants with cuffs can give sparks a place to hide, so avoid them.
- Every part of the welder's body should be covered with fire-resistant personal protective equipment including specially-designed gloves and shoes. Face shields are another essential piece of PPE to protect welders from not only harmful ultraviolet rays, but also from the sparks produced in the process.

Surrounding Area(s)

- Welders and anyone near a welding site should understand the risks. Things they may never have considered dangerous can take on a whole new dimension when they encounter the high energy levels produced during welding. For example, the simple act of carrying a plastic cigarette lighter in a pants pocket can lead to an injury-causing explosion.
- It's important to remember that the time to think about first-aid is not after a fire erupts. By keeping fire blankets, extinguishers and first-aid kits nearby, you can help minimize the chance of serious burns in the event the protective clothing fails or another employee comes too close to the welder.

Conclusion

- Welding is a dangerous and complex process that takes some planning to perform safely. Experience plays a big role with such a risky work process. Only well-trained employees should ever use a welder. Inexperienced welders should always work with an accomplished partner until they gain sufficient skills to perform the job safely.

Attach this copy to your applicable safety committee meeting minutes or safety meeting minutes for proof of review.